

## Metabo 612216000

# Metabo KGSV 72 Xact SYM Mitre Saw

User Manual - Model: 612216000

Brand: Metabo

## 1. INTRODUCTION

This user manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your Metabo KGSV 72 Xact SYM Mitre Saw. Please read this manual thoroughly before operating the tool to ensure proper usage and to prevent injury or damage.

The Metabo KGSV 72 Xact SYM is a high-performance mitre saw designed for precise cutting of various materials, including wood, aluminum, and plastic profiles. Its unique features, such as the integrated pull function and synchronously adjustable stop system, enhance accuracy and versatility for a wide range of cutting tasks.

## 2. SAFETY INSTRUCTIONS

Always adhere to general power tool safety guidelines and the specific instructions provided in this manual. Failure to do so may result in serious injury or property damage.

- Wear appropriate personal protective equipment (PPE), including safety glasses, hearing protection, and gloves.
- Ensure the workpiece is securely clamped before cutting.
- Keep hands and fingers away from the saw blade.
- Disconnect the power supply before performing any adjustments, maintenance, or blade changes.
- Maintain a clean and well-lit work area.
- Do not operate the saw in damp or wet conditions.
- Ensure proper ventilation to clear dust and debris.
- Familiarize yourself with the emergency stop procedure.

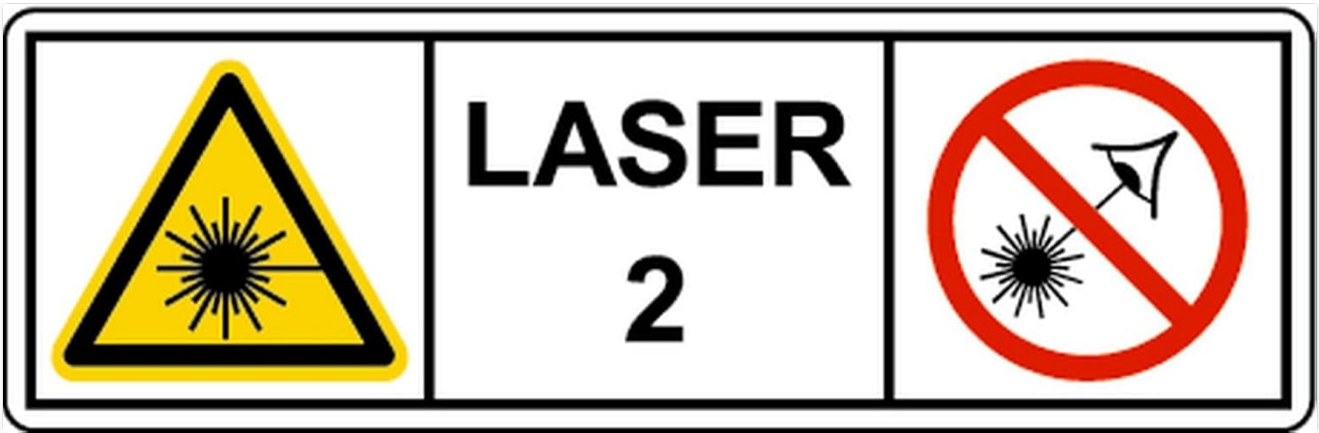
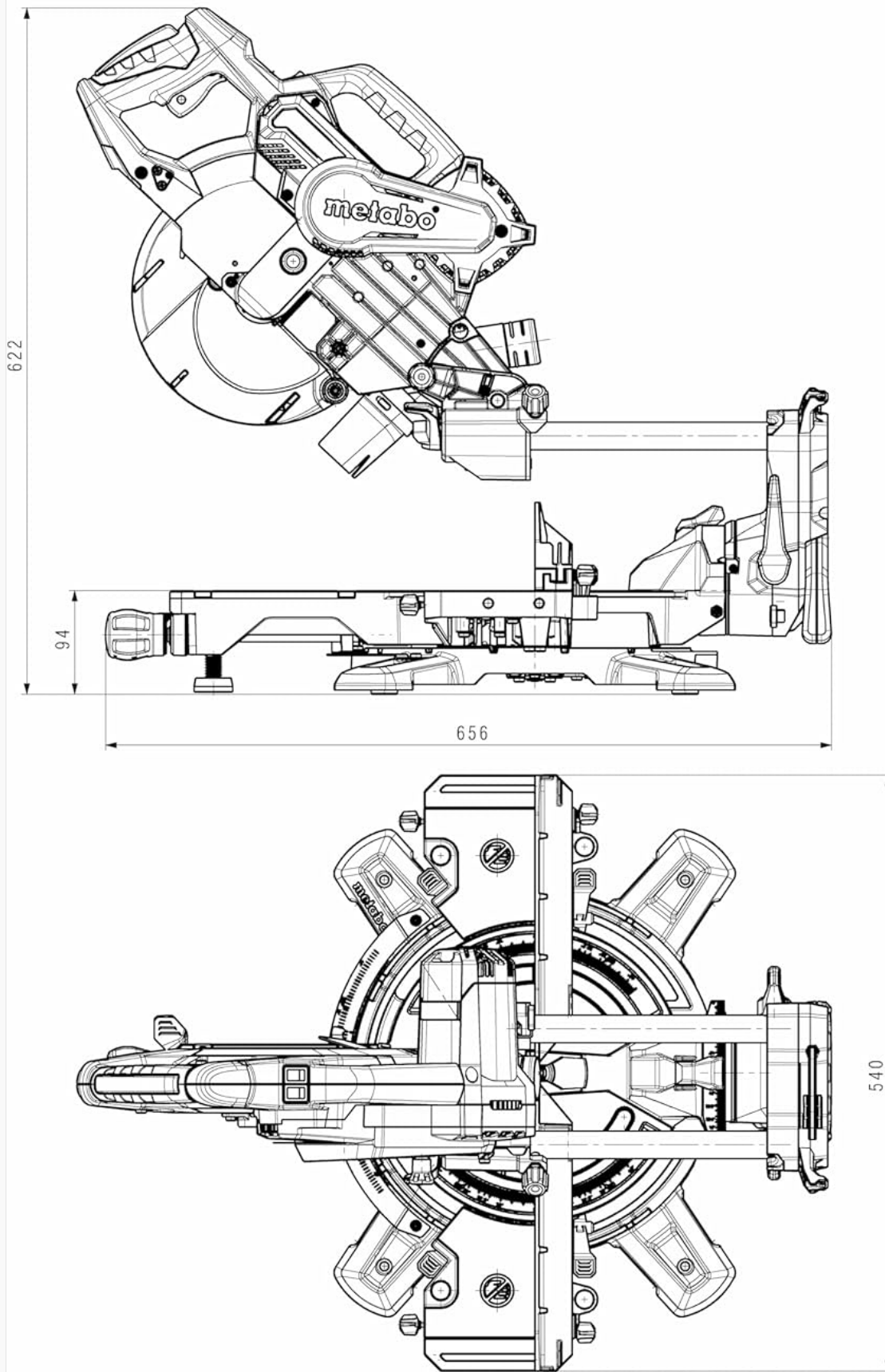


Figure 2.1: Laser Warning Label. This tool uses a Class 2 laser. Avoid direct eye exposure to the laser beam.

### 3. COMPONENTS AND PARTS

Understanding the different parts of your mitre saw is crucial for safe and effective operation.

# KGSV 72 Xact Sym 6.12216



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Figure 3.1: Technical diagram of the Metabo KGSV 72 Xact SYM Mitre Saw, showing key dimensions and components from top and side views.

- Saw Head with Motor and Blade Guard
- Saw Blade (216 mm)
- Sliding Rails (for pull function)
- Rotating Table with Angle Scale
- Integrated Table Extensions
- Material Clamp
- Dual Line Laser
- LED Work Light
- Side Stops (sliding)
- Depth Stop
- Chip Collection Funnel
- Carry Handles

## 4. SETUP

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Before initial use, ensure the saw is placed on a stable and level surface. Unpack all components and verify against the packing list.

1. **Assembly:** The saw comes largely pre-assembled. Attach any remaining components as per the quick start guide (if included).
2. **Table Extensions:** Extend the integrated table extensions to support longer workpieces.
3. **Power Connection:** Connect the saw to a 240 Volt power supply. Ensure the power cord is not in the path of the cutting operation.
4. **Initial Adjustments:** Perform any necessary initial adjustments for squareness and angle accuracy. The saw features quick and precise adjustment of common angles via locking points.



Figure 4.1: The saw's double-sided rotating table and tiltable saw head allow for maximum flexibility in cutting angles.

## 5. OPERATING INSTRUCTIONS

Follow these steps for safe and effective operation of your mitre saw.

1. **Workpiece Placement:** Place the workpiece firmly against the fence and on the saw table. Use the material clamp to secure it.
2. **Angle Adjustment:** Adjust the rotating table and/or the saw head to the desired cutting angle. The synchronously adjustable stop system allows for precise angle transfer without calculation.
3. **Laser Guidance:** Activate the dual line laser to precisely visualize the cutting line on your workpiece. The laser projects lines to the left and right of the saw blade.
4. **LED Work Light:** Turn on the bright LED work light for improved visibility of the cutting area.
5. **Speed Control:** Adjust the cutting speed according to the material being cut. Lower speeds are recommended for aluminum and plastic profiles.
6. **Cutting Operation:**
  - For standard cuts, lower the saw head smoothly through the workpiece.
  - For wide workpieces (up to 305 mm), utilize the integrated pull function. Pull the saw head towards you, engage the motor, and push the saw head through the workpiece.

- For groove production, use the depth stop feature to control the cutting depth.

7. **Chip Extraction:** The integrated chip collection funnel ensures effective chip extraction during operation. Connect a suitable dust extractor for optimal results.



Figure 5.1: Examples of the Metabo KGSV 72 Xact SYM Mitre Saw in use, demonstrating its application for precise cuts on various materials.

## 6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your mitre saw.

- **Cleaning:** After each use, clean the saw thoroughly to remove dust and debris, especially from the blade guard, motor vents, and sliding rails. Use a soft brush or compressed air.
- **Blade Inspection and Replacement:** Regularly inspect the saw blade for sharpness and damage. A dull or damaged blade can lead to poor cuts and increased motor strain. Use the provided tool for safe blade changes. Ensure the saw is unplugged before changing the blade.
- **Lubrication:** Periodically lubricate the sliding rails and other moving parts as recommended in the detailed service manual (if applicable).
- **Electrical Cord:** Inspect the power cord for any signs of damage. Do not use the tool if the cord is damaged.

## 7. TROUBLESHOOTING

This section addresses common issues you might encounter. For problems not listed here, contact Metabo customer support.

Problem	Possible Cause	Solution
Saw does not start	No power supply; Faulty switch; Overload protection activated	Check power connection; Inspect switch; Allow motor to cool down and reset
Poor cutting quality / Blade binding	Dull or damaged blade; Incorrect blade for material; Workpiece not secured	Replace blade; Use appropriate blade; Secure workpiece firmly
Excessive vibration	Loose blade; Damaged blade; Unstable work surface	Tighten blade; Replace blade; Ensure stable setup

## 8. SPECIFICATIONS

Detailed technical specifications for the Metabo KGSV 72 Xact SYM Mitre Saw.

Feature	Value
Manufacturer	Metabowerke GmbH
Model Number	612216000
Item Weight	18.3 Kilograms
Product Dimensions (L x W x H)	66 x 54 x 41.5 cm
Material	Metal
Power Source Type	Corded Electric
Voltage	240 Volts
Wattage	1800 Watts
Blade Length	216 millimeters

Feature	Value
Speed	4500 RPM
Measurement System	Metric
Max. Cutting Width (90°/45°)	305 mm / 215 mm
Max. Cutting Depth (90°/45°)	72 mm / 42 mm
Special Features	Spindle lock, Dual line laser, LED work light, Integrated pull function

## 9. Box Contents

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The following items are included with your Metabo KGSV 72 Xact SYM Mitre Saw:

- Metabo KGSV 72 Xact SYM Mitre Saw (Model 612216000)
- Carbide Saw Blade (60 teeth)
- 2 Integrated Table Extensions
- Angle Transfer Device
- Material Clamp
- Tool for Saw Blade Change
- Cable Winder

## 10. WARRANTY AND SUPPORT

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For warranty information, service, or technical support, please refer to the official Metabo website or contact your local authorized Metabo dealer. Keep your purchase receipt as proof of purchase for warranty claims.